

What is Claimed is:

1. A method of constructing a plurality of software systems, comprising the following steps:

a) maintaining an inventory of software modules, which includes:

i) a group of type A modules; and

ii) a collection of type B modules;

b) when constructing each software system,

i) including copies of the entire group of type A modules;

ii) including copies of selected type B modules; and

iii) generating at least one customized module, which is a copy of neither a type A nor a Type B module.

2. Method according to claim 1, wherein each system constructed performs the following functions:

- 1) processing of the content of messages;
- 2) packaging of messages into packets for transport out of the system;
- 3) transfer of messages into, and out of, the system; and
- 4) coordination of functions (1), (2), and (3).

3. Method according to claim 2, wherein functions (3) and (4) are performed using type A modules exclusively.

4. Method according to claim 3, wherein function (1) is performed using a combination of type A, type B, and customized modules.

5. Method according to claim 4, wherein function (2) is performed using a combination of type A, type B, and customized modules.

*Mark a'*

6. An expedited method of assembling a software system, comprising the following steps:

- a) fabricating a collection of software systems, each of which contains
  - i) a processing module (PROC\_MOD) which processes content
  - ii) a packaging module (PAK\_MOD) which packages messages into packets for transport out of the system;
  - iii) a communication module (COM\_MOD) which accepts and delivers message packets; and
  - iv) a system control module (CONTROL) which coordinates the processes of (i), (ii), and (iii);
- b) during the fabrication of paragraph (a),
  - i) fabricating identical CONTROL modules in all systems;
  - ii) fabricating identical COM\_MOD modules in all systems;
  - iii) fabricating PAK\_MOD modules in all systems, such that:
    - A) copies of a software unit A is contained in every PAK\_MOD module;
    - B) some PAK\_MOD modules contain a software unit B with no unit C; and
    - C) some PAK\_MOD modules contain a software unit C with no unit B.

7. Method according to claim 6, and further comprising the following step:

- iv) fabricating PROC\_MOD modules in all systems, such that:
  - A) copies of a software unit D is contained in every PROC\_MOD module;
  - B) some PROC\_MOD modules contain a software unit E with no unit F; and
  - C) some PROC\_MOD modules contain a software unit F with no unit E.

*Abd 02*